



35L6-GT

BEAM POWER AMPLIFIER

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	35	ac or dc volts
Current	0.15	amp

Direct Interelectrode Capacitances (Approx.):°

Grid No.1 to Plate	0.8	μμf
Input	13	μμf
Output	9.5	μμf

° With no external shield.

Mechanical:

Mounting Position	Any
Maximum Overall Length	3-5/16"
Maximum Seated Length	2-3/4"
Maximum Diameter	1-5/16"
Bulb	T-9
Base	Intermediate-Shell Octal 7-Pin
Basing Designation for BOTTOM VIEW	G-7AC

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Plate
Pin 4 - Grid No.2
Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Cathode, Grid No.3

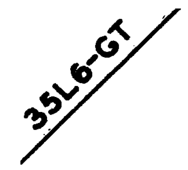
AF POWER AMPLIFIER - Class A_1

Maximum Ratings, ***Design-Center Values:***

PLATE VOLTAGE	200 max.	volts
GRID-No.2 (SCREEN) VOLTAGE	117 max.	volts
PLATE DISSIPATION	8.5 max.	watts
GRID-No.2 DISSIPATION	1.0 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

Plate Voltage	110	200	volts
Grid-No.2 Voltage	110	110	volts
Grid-No.1 (Control-Grid) Voltage	-7.5	-8	volts
Peak AF Grid-No.1 Voltage	7.5	8	volts
Zero-Signal Plate Current	40	41	ma.
Max.-Signal Plate Current	41	44	ma.
Zero-Signal Grid-No.2 Current	3	2	ma.
Max.-Signal Grid-No.2 Current	7	7	ma.
Plate Resistance (Approx.)	14000	40000	ohms
Transconductance	5800	5900	μmhos
Load Resistance	2500	4500	ohms
Total Harmonic Distortion	10	10	%
Max.-Sig. Power Output	1.5	3.3	watts





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Maximum Circuit Values (for maximum rated conditions):

Grid-No.1-Circuit Resistance:

For fixed bias	0.1 . .	megohm
For cathode bias	0.5 . .	megohm

Curves shown under Type 35B5 are also applicable to the 35L6-GT.



35L6-GT



AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION

E_f = 35 VOLTS GRID-Nº2 VOLTS = 110

GRID-Nº1 (I_{C1}) MILLIAMPERES

PLATE VOLTS

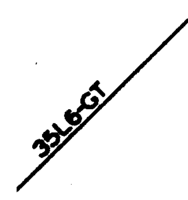
PLATE (I_b) OR GRID-Nº2 (I_{C2}) MILLIAMPERES

AUG. 11, 1941

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6309

35L6-GT





35L6-GT

OPERATION CHARACTERISTICS

E_f = 35 VOLTS   PLATE VOLTS = 200   GRID №2 VOLTS = 110
GRID-№1 VOLTS = −8
SIGNAL VOLTS (RMS) = 5.65

POWER OUTPUT – WATTS: 1, 2, 3, 4, 5

TOTAL HARMONIC DISTORTION – PER CENT: 4, 8, 12, 16

TOTAL DISTORTION

POWER OUTPUT

0   2000   4000   6000

LOAD RESISTANCE – OHMS

AUG. 21, 1941

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM – 6315

35L6-GT

RCA

35L6-GT



AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION

E_f = 35 VOLTS
GRID-No 2 CONNECTED TO PLATE

GRID VOLTS E_{c1}=0
-10
-20
-30
E_{c1}=-40
-50
-10
-20

PLATE VOLTS: 0, 100, 200, 300, 400

PLATE MILLIAMPERES: 0, 100, 200, 300

AUG. 6, 1941

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6307R1